AMENDMENTS TO THE CLAIMS

1. (currently amended): A process for amplifying a nucleic acid of a leukocyte or epithelial target cell ~~or virus~~, which process comprises:

a) contacting a sample containing or suspected of containing a leukocyte or epithelial target cell ~~or virus~~ with a magnetic microbead ~~not comprising a biomolecule that binds to said target cell or virus with high specificity~~;

b) allowing said target cell ~~or virus~~, if present in said sample, to bind to said magnetic microbead nonspecifically or with low specificity to form a conjugate between said target cell ~~or virus~~ and said magnetic microbead; and

c) separating said conjugate from other undesirable constituents via a magnetic force to isolate said target cell ~~or virus~~ from said sample; and

d) applying said separated conjugate to a nucleic acid amplification system to amplify a nucleic acid from said target cell ~~or virus,~~

~~wherein said biomolecule is selected from the group consisting of an antibody, an amino acid, a peptide, a protein, a nucleoside, a nucleotide, an oligonucleotide, a nucleic acid, a vitamin, a monosaccharide, an oligosaccharide, a carbohydrate, a lipid and a complex thereof; and~~

wherein said process does not comprise a step of lysing said target cell or virus to release said nucleic acid prior to applying said separated conjugate to said nucleic acid amplification system.

2. (original): The process of claim 1, wherein the sample is a clinical sample.

3. (original): The process of claim 1, wherein the sample is selected from the group consisting of serum, plasma, whole blood, sputum, cerebral spinal fluid, amniotic fluid, urine, gastrointestinal contents, hair, saliva, sweat, gum scrapings, marrow, tissue and cell culture.

4-5. (canceled)

6. (original): The process of claim 1, wherein the magnetic microbead comprises a magnetizable substance selected from the group consisting of a paramagnetic substance, a ferromagnetic substance and a ferrimagentic substance.

7. (original): The process of claim 6, wherein the magnetizable substance comprises a metal composition.

8. (original): The process of claim 7, wherein the metal composition is a transition metal composition or an alloy thereof.

9. (original): The process of claim 8, wherein the transition metal is selected from the group consisting of iron, nickel, copper, cobalt, manganese, tantalum, zirconium and cobalt-tantalum-zirconium (CoTaZr) alloy.

10. (original): The process of claim 7, wherein the metal composition is Fe_3O_4.

11. (original): The process of claim 1, wherein the magnetic microbead has a diameter ranging from about 5 to about 50,000 nanometers.

12. (original): The process of claim 1, wherein the magnetic microbead is untreated or modified with an organic molecule.

13. (original): The process of claim 1, wherein the magnetic microbead is modified to comprise a hydroxyl, a carboxyl or an epoxy group.

14-17. (canceled)

18. (original): The process of claim 1, which further comprises washing the separated conjugate to remove the undesirable constituents before applying separated conjugate to a nucleic acid amplification system.

19. (original): The process of claim 1, which is automated.

20. (original): The process of claim 1, which is completed within a time ranging from about 0.5 minute to about 30 minutes.

21. (currently amended): The process of claim 1, which is conducted in ~~an eppendorf~~ a microcentrifuge tube.

22. (original): The process of claim 1, which is conducted in the absence of a precipitation or centrifugation procedure.

23. (original): The process of claim 1, which is conducted in the absence of a poisonous agent.

24. (original): The process of claim 1, which is conducted at an ambient temperature ranging from about 0°C to about 35°C without temperature control.

25. (original): The process of claim 1, wherein the sample volume ranges from about 5 μl to about 50 μl.

26-27. (canceled)

28. (original): The process of claim 1, wherein the nucleic acid amplification system is selected from the group consisting of polymerase chain reaction (PCR), ligase chain reaction (LCR), nucleic acid sequence-based amplification (NASBA), strand displacement amplification (SDA) and transcription-medicated amplification (TMA).

29-36. (canceled)

37. (new): A process for amplifying a nucleic acid of a leukocyte cell, which process comprises:

a) contacting a whole blood sample containing or suspected of containing a leukocyte cell with a magnetic microbead;

b) allowing said leukocyte cell, if present in said sample, to bind to said magnetic microbead nonspecifically or with low specificity to form a conjugate between said leukocyte cell and said magnetic microbead; and

c) separating said conjugate from other undesirable constituents via a magnetic force to isolate said leukocyte cell from said sample; and

d) applying said separated conjugate to a nucleic acid amplification system to amplify a nucleic acid from said leukocyte cell.

38. (new): A process for amplifying a nucleic acid of an epithelial cell, which process comprises:

a) contacting a saliva sample containing or suspected of containing an epithelial cell with a magnetic microbead;

b) allowing said epithelial cell, if present in said sample, to bind to said magnetic microbead nonspecifically or with low specificity to form a conjugate between said epithelial cell and said magnetic microbead; and

c) separating said conjugate from other undesirable constituents via a magnetic force to isolate said epithelial cell from said sample; and

d) applying said separated conjugate to a nucleic acid amplification system to amplify a nucleic acid from said epithelial cell.